Sheet

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of

	Complete It Known
Application Number	Not Assigned 10/798,058
Filing Date	March 11, 2004
First Named Inventor	Mathis
Group Art Unit	Not Assigned 1653
Examiner Name	Not Assigned Robert Mondesi
Attorney Docket Number	035718/274644(5718-201)

			U. S. PATENT I	DOCUMENTS		
Examiner Initials*	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Li Relevant Passages of R Appear	elevant Figures
RM	L	US-5,693,491	12-02-1997	Bulla et al.		
RM	2	US-5,804,393	09-08-1998	Geiser et al.		
RM	3	US-6,007,981	12-28-1999	Bulla		
		F	DEICN DATES	T DOCUMENTS		
		Foreign Patent Document	DREIGN PATEN	T DOCUMENTS	Pages, Columns, Lines,	English
Examiner Initials	Cite No.	Country Code Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	English Language Translation Attached
RM	4	WO 96/12964 A1	02-05-1996	University of Wyoming		
RM	5	WO 98/59048 A1	12-30-1998	University of Wyoming		
RM	6	WO 01/34807 A2	05-17-2001	Bulla, L.A., Jr., et al.		
		-	OTHER DO			
Examiner Initials	Cite No.			of the article (when appropriate), title page(s), volume-issue number(s), pub		English Language Translation Attached
RM	7	Receptor BT-r ₁ of Manduca	sexta," May 1998	n of the Insecticidal Toxin Bin , A dissertation submitted to the the University of Wyoming, I	e Department of	
	8	adjacent to the membrane-pr	oximal extracellulation the entornopathog	illus thuringiensis bind specifi ar domain of BT-R ₁ in Mandu genicity of Bacillus thuringiens b. 1025-1036, Vol. 32.	ca sexta:	
	9		sgenic plants: An	emerging approach to pest cor	ntrol," Nature	
	10		in Tobacco Hornw	ner Characterization of BT-R ₁ , vorm (<i>Manduca Sexta</i>) Midgut 6		

Examiner	Date
Signature	Considered

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449/PTO				Complete if Known			
(Revised 04	/2003)			Application Number	Not Assigned	10/798.058	
TAURO E		IDICOLO	OLIDE	Filing Date	March 11, 2004		
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT		First Named Inventor	Mathis			
			Group Art Unit	Not Assigned	1653		
(t	lse as many she	eets as necessary)	Examiner Name	Not Assigned	Robert Mondesi	
Sheet	2	_ of	33	Attorney Docket Number	035718/274644(5718-201)	

RM	11	FRANKLIN, S.W., et al., "Southern analysis of BT-R ₁ , the <i>Manduca sexta</i> gene encoding the receptor for the Cry1Ab toxin of <i>Bacillus thuringiensis</i> ," <i>Mol Gen Genet</i> , 1997, pp. 517-524, Vol. 256	
	12	GAHAN, J.L., et al., "Identification of a Gene Associated with Bt Resistance in <i>Heliothis virescens</i> ," <i>Science</i> , August 3, 2001, pp. 857-860, Vol. 293	
	13	GARCZYNSKI, S.F., et al., "Identification of Putative Insect Brush Border Membrane-Binding Molecules Specific to Bacillus thuringiensis δ-Endotoxin by Protein Blot Analysis," Applied and Environmental Microbiology, October 1991, pp. 2816-2820, Vol. 57, No. 10	
	14	GILL, S.S., et al., "Identification, Isolation, and Cloning of a <i>Bacillus thuringiensis</i> CrylAc Toxin-binding Protein from the Midgut of the Lepidopteran Insect <i>Heliothis virescens</i> ," <i>The Journal of Biological Chemistry</i> , November 10, 1995, pp. 27277-27282, Vol. 270, No. 45	
	15	HOFTE, H. and WHITELEY, H.R., "Insecticidal Crystal Proteins of Bacillus thuringiensis," Microbiological Reviews, June 1989, pp. 242-255, Vol. 53, No. 3	
	16	HUA, G., et al., "Binding Analyses of Bacillus thuringiensis Cry δ-Endotoxins Using Brush Border Membrane Vesicles of Ostrinia nubilalis," Applied and Environmental Microbiology, February 2001, pp. 872-879, Vol. 67, No. 2	
	17	IHARA, H., et al., "Purification and partial amino acid sequences of the binding protein from bombys mori for CrylAa δ-endotoxin of Bacillus thuringiensis," Comparative Biochemistry and Physiology," Part B, 1998, pp. 197-204, Vol. 120	
	18	JURAT-FUENTES, J.L., et al., "Altered Glycosylation of 63-68-Kilodalton Microvillar Proteins in Heliothis virescens Correlates with Reduced Cryl Toxin Binding, Decreased Pore Formulation, and Increased Resistance to Bacillus thuringiensis Cryl Toxins," Applied and Environmental Microbiology, November 2002, pp. 5711-5717, Vol. 68, No. 11	
	19	KEETON, T.P., and BULLA, L.A., Jr., "Ligand Specificity and Affinity of BT-R ₁ , the <i>Bacillus thuringiensis</i> Cry1A Toxin Receptor from Manduca sexta, Expressed in Mammalian and Insect Cell Cultures," Applied and Environmental Microbiology, September 1997, pp. 3419-3425, Vol. 63, No. 9	
	20	KEETON, T.P., et al., "Effects of Midgut-Protein-Preparative and Ligand Binding Procedures on the Toxin Binding Characteristics of BT-R ₁ , a Common High-Affinity Receptor in Manduca sexta for Cry1A Bacillus thuringiensis Toxins," Applied and Environmental Microbiology, June 1998, pp. 2158-2165, Vol. 64, No. 6	
$\overline{\psi}$	21	KNIGHT, P.J.K., et al., "The receptor for <i>Bacillus thuringiensis</i> CrylA(c) delta-endotoxin in the brush border membrane of the lepidopteran <i>Manduca sexta</i> is aminopeptidase N," <i>Molecular Microbiology</i> , 1994, pp. 429-436, Vol. 11, No. 3	

l	Examiner	Date	
	Signature	Considered	

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449/PTO				Complete if Known			
(Revised 04/	2003)			Application Number	Not Assigned	10/798,058	
IMEOD	NA A TION	DISCLO	CHIDE	Filing Date	March 11, 2004		
				First Named Inventor	Mathis		
STATEMENT BY APPLICANT		Group Art Unit	Not Assigned	1653			
(U	se as many she	eis as necessary)		Examiner Name	Not Assigned	Robert Mondesi	
Sheet	3	of	3	Attorney Docket Number	035718/274644(5718-201)	

RM	22	LEE, M.K. et al., "Aminopeptidase N Purified from Gypsy Moth Brush Border Membrane Vesicles is a Specific Receptor for <i>Bacillus thuringiensis</i> CrylAc Toxin," <i>Applied and Environmental Microbiology</i> , August 1996, pp. 2845-2849, Vol. 62, No. 8	
	23	MAATY, W.S.A., "Identification, Purification and Cloning of a High-Affinity Invertebrate Protocadherin Receptor BT-R ₂ from the Pink Bollworm (<i>Pectinophora Gosspiella</i>) for <i>Bacillus Thuringiensis</i> CRY1A Toxins," Dissertation submitted to the Dept. of Molecular Biology and The Graduate School of the University of Wyoming, July 1999, pp. 1-146	
	24	McGAUGHEY, W.H., et al., "Bt resistance managementA plan for reconciling the needs of the many stakeholders in Bt-based products," <i>Nature Biotechnology</i> , February 1998, pp. 144-146, Vol. 16	
	25	MIDBOE, E.G., "Characterization of the BT-R ₁ Gene and Its Expression in Manduca sexta," Dissertation submitted to the Dept. of Molecular Biology and The Graduate School of the University of Wyoming, July 1999, pp. 1-135	
	26	NAGAMATSU, Y., et al., "Cloning, Sequencing, and Expression of the Bombyx mori Receptor for Bacillus thuringiensis Insecticidal CryIA(a) Toxin, "Biosci. Biotechnol. Biochem., 1998, pp. 727-734, Vol. 62, No. 4	
	27	NAGAMATSU, Y., et al., "The cadherin-like protein is essential to specificity determination and cytotoxin action of the <i>Bacillus thuringiensis</i> insecticidal CryIAa toxin," <i>FEBS Letters</i> , 1999, pp. 385-390, Vol. 460	
	28	ODDOU, P., et al., "Immunologically unrelated heliothis sp. And Spodoptera sp. Midgut membrane-proteins bind Bacillus thuringiensis CrylA(b) δ-endotoxin," Eur. J. Biochem., 1993, pp. 145-150, Vol. 212	
	29	ROUSH, R.T., and SHELTON, A.M., "Assessing the odds: The emergency of resistance to Bt transgenic plants," <i>Nature Biotechnology</i> , September 1997, pp, 816-817, Vol. 15	
	30	RUDINGER, J., "Characteristics of the amino acids as components of a peptide hormone sequence," <i>Peptide Hormones</i> , June 1976, pp. 1-7, J. A. Parsons, Editor; University Park Press, Baltimore	
	31	SKOLNICK, J. and FETROW, J.S., "From genes to protein structure and function: novel applications of computational approaches in the genomic era," <i>Trends in Biotechnology</i> , 2000, pp. 34-39, Vol. 18, No. 1	
	32	VADLAMUDI, R.K., et al., "A Specific Binding Protein from manduca sexta for the Insecticidal Toxin of Bacillus thuringiensis subsp. berliner," J. Biol. Chem., June 15, 1993, pp. 12334-12340, Vol. 268, No. 17	
$ \psi $	33	VADLAMUDI, R.K. et al., "Cloning and Expression of a Receptor for an Insecticidal Toxin of Bacillus thuringiensis," J. Biol. Chem., March 10, 1995, pp. 5499-5494, Vol. 270, No. 10	

RTA01/2150333v1

	7	Y	
Examiner	· · · · · · · · · · · · · · · · · · ·	Date	
	/Robert Mondesi/	Date	07/24/2006
Signature	,	Considered	0,,21,2000
	^	J 001.0.00100	

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

OF		ute for form 1449/P	го			Complete if Known
_ /\ T =	- Opposis	ed 04/2003)			Application Number	10/798,058
/0			DISCLO	CIDE	Filing Date	March 11, 2004
	0 700	ORMATION	DISCLO	SUKE	First Named Inventor	Mathis
UEC 3	SE	ORMATION ATEMENT E	SY APPLI	CANT	Group Art Unit	1653
_ \	TRADESheet	(Use as many she	els as necessary)	Examiner Name	Not Assigned Robert Mondesi
WYENT O	heet	1	of	1	Attorney Docket Number	035718/274644

		-	U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Figure Appear

Examiner Initials	Cite No.	Foreign Patent Document Country Code - Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	English Language Translation Attached
RM	35	WO 01/36639 A2	05-25-2001	Pioneer Hi-Bred International, Inc.	Page 2, Lines 18- 32; Claims 1-25; Seq. ID NOS. 1-6	
RM	36	WO 02/074079 A2	09-26-2002	Clemson University	Page 12, Line 1; Page 14, Line 29	

		OTHER DOCUMENTS	
Examiner Initials	Cite . No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	English Language Translation Attached
RM	37	NAKANISHI, K., et al., "Aminopeptidase N Isoforms from the Midgut of Bombyx mori and Plutella xylostellaTheir Classification and the Factors that Determine Their Binding Specificity to Bacillus thuringiensis Cryl A Toxin," FEBS Letters, May 22, 2002, pp. 215-220, Vol. 519, No. 1-3	

RTA-01/2171913v1

Examiner	/Robert Mondesi/	Date	07/24/2006
Signature	/ RODEIC Mondesi/	Considered	07/24/2000

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute for form 1449/PTO					Complete if Known
(Revised 04/2003)				Application Number	10/798,058
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			CLIDE	Filing Date	March 11, 2004
				First Named Inventor	John P. Mathis
				Group Art Unit	1653
				Examiner Name	NorAssigned Robert Mondesi
Sheet	1	of ·	1	Attorney Docket Number	035718/274644

	U. S. PATENT DOCUMENTS						
Examine Initials		Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear		
		US-					
		US-					

	FOREIGN PATENT DOCUMENTS						
Examiner Initials	Cite No.	Foreign Patent Document Country Code - Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	English Language Translation Attached	
RM	34	EP 1 124 426 B1	01-22-2003	Mycogen Corporation			
	<u> </u>						

	OTHER DOCUMENTS					
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	English Language Translation Attached			

RTA01/2156329v1

Examiner	/Robert Mondesi/	Date	07/24/2006
Signature	/ ROBELC HONGEST/	Considered	

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.